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KING & SPALDING : Jill A. McWhirter
Suite 4000
1100 Louisiana
Houston, TX 77002-5213

EXAMINER

AURORA, REENA

ART UNIT	PAPER NUMBER
2862	

DATE MAILED: 06/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

This communication is in response to amendment received on 04/13/06.

Claims 1 – 8, 10 – 17 and 19 – 24 are presented for examination.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the wiper rubber positioned around exterior of the pipe segments must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

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the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claim 1 is objected to because of the following informalities: the phrase "the exterior of the pipe segments" lacks antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16 – 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey (GB 1602065) in view of Edens et al. (5,671,155) and further in view of Price et al. (5,720,345).

As to claims 16 and 19, Bailey discloses a method for counting pipe joints comprising producing a magnetic field (104, 106, fig. 3) near the well, moving the plurality of pipe segments (103) into or out of the well, detecting the changes (105) in the magnetic field caused by the passing of the pipe segment connectors (103) through the magnetic field, and counting the numbers of changes in the magnetic field to thereby produce a pipe segment count (page 2, lines 32 – 57 and 90 - 124). Bailey's

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fails to disclose a processing module to filter the noise in the signal from the magnetic field measuring device and feeding the pipe segment count into a computer system.

Edens et al. (hereinafter Edens) discloses an apparatus and method for detecting and displaying irregularities in ferrous pipe wherein Edens teaches that it is well known in the art to filter noise from the signal to produce signal representative of changes in magnetic field (col. 1, lines 27 - 31). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the device of Bailey with the teachings of Edens by filtering the noise in the signal from the magnetic field measuring device to accurately sense the changes in the magnetic field. Price et al. (hereinafter Price) teaches a casing joint detector wherein the pipe segment count is fed into the computer system (19, fig. 1). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the device of Bailey with the teachings of Edens and further in view of the teachings of Price to feed the pipe segment count to the computer for faster and accurate determination of the pipe segment count.

As to claim 17, Bailey discloses that the changes in the magnetic flux are detected by a voltmeter attached to a coil of wire placed near the device capable of producing the magnetic field (page 2, lines 114 - 120).

Claims 20 – 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey (GB 1602065) in view of Edens et al. (5,671,155) and Price et al. (5,720,345) as applied to claim 16 above, and further in view of Dillenbeck et al. (6,802,373).

As to claims 20 - 22, Bailey's, Edens and Price fail to disclose that the magnetic field detection device is embedded into a wiper rubber. Dillenbeck et al. (hereinafter Dillenbeck) discloses an apparatus and method of detecting interfaces between well fluids wherein the magnetic field detection device may be embedded in rubber wiper (col. 4, lines 30 - 32). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the device of Bailey in view of the teachings of Edens and Price and further with the teachings of Dillenbeck by embedding the magnetic detection device in wiper rubber such that the magnetic field detection device is closer to the pipe segment and would therefore accurately sense the changes in the magnetic field.

Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey (GB 1602065) in view of Edens et al. (5,671,155) and Price et al. (5,720,345) as applied to claim 16 above, and further in view of Relton et al. (6,720,764).

As to claims 23 and 24, Bailey, Edens and Price fail to disclose that an alarm sounds each time a pipe segment passing into or out of the well. Relton et al. (hereinafter Relton) discloses a sensor system for detection of tool joints wherein an alarm sounds each time a pipe segment passing into or out of the well (fig. 5, col. 9, lines 61 - 65). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the device of Bailey in view of the teachings of Edens and Price and further with the teachings of Relton such that

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including an alarm in Bailey's device would notify the operator instantly of the presence of the tool joints.

Allowable Subject Matter

Claims 1 – 8 and 10 – 15 are allowed.

Response to Arguments

Applicant's arguments with respect to claims 1 – 8, ^{10-17 and 19-24 est} ~~10-24~~ have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reena Aurora whose telephone number is 571-272-2263. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, E. Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Reeha Aurora